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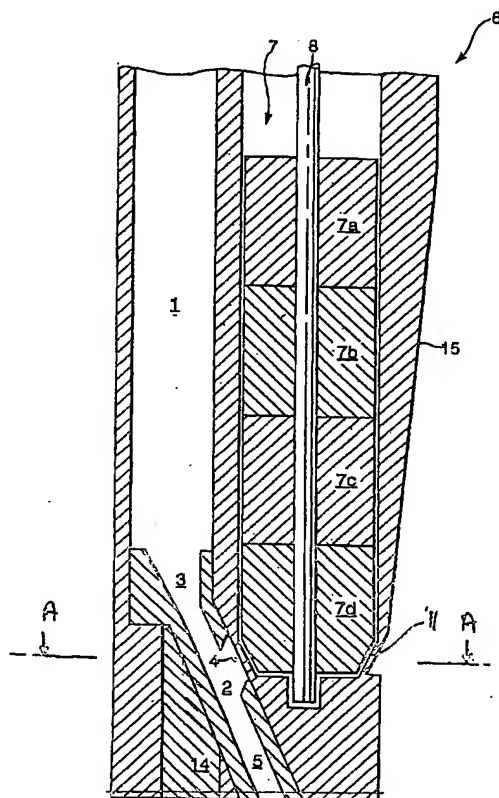
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| <p><b>(51) International Patent Classification<sup>7</sup>:</b> <b>E21B 7/18,</b><br/>B24C 9/00</p> <p><b>(21) International Application Number:</b><br/>PCT/EP2004/051428</p> <p><b>(22) International Filing Date:</b> 9 July 2004 (09.07.2004)</p> <p><b>(25) Filing Language:</b> English</p> <p><b>(26) Publication Language:</b> English</p> <p><b>(30) Priority Data:</b><br/>03077159.6 9 July 2003 (09.07.2003) EP<br/>04101506.6 14 April 2004 (14.04.2004) EP</p> <p><b>(71) Applicant (for AE, AG, AL, AM, AT, AU, AZ, BA, BB, BE, BG, BR, BW, BY, BZ, CH, CN, CO, CR, CU, CY, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,</b></p> | <p><b>MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, SZ, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW only): SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V. [NL/NL];</b> Carel van Bylandtlaan 30, NL-2596 HR The Hague (NL).</p> <p><b>(71) Applicant (for CA only): SHELL CANADA LIMITED [CA/CA];</b> 400 - 4TH Avenue S.W., Calgary, Alberta T2P 2H5 (CA).</p> <p><b>(72) Inventor; and</b></p> <p><b>(75) Inventor/Applicant (for US only): BLANGÉ, Jan-Jette [NL/NL];</b> Kesslerpark 1, NL-2288 GS Rijswijk (NL).</p> <p><b>(81) Designated States (unless otherwise indicated, for every kind of national protection available):</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,</p> |
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**(54) Title:** TOOL FOR EXCAVATING AN OBJECT



**(57) Abstract:** The tool comprises: - a jetting system arranged to impinging the object to be excavated with a jetted stream of a drilling fluid mixed with abrasive particles, the jetting system being provided with at least a mixing chamber (2) with a drilling fluid inlet (3), a second inlet (4) for abrasive particles, and an outlet nozzle for releasing the drilling fluid mixed with the abrasive particles; - a recirculation system arranged to recirculate at least some of the abrasive particles, from a return stream of the fluid mixed with the abrasive particles downstream of the impingement surface of the jet with the object back to the jetting system, whereby the abrasive particles comprise a magnetic material, which recirculation system comprises a separator magnet (7) for separating the abrasive particles from said return stream and for transporting the particles to the second inlet; - a piece of magnetic material (14) that is provided in or in the vicinity of the mixing chamber (2) such as to draw a part of the magnetic field generated by the separator magnet into the mixing chamber (2).



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